Mr. William Banks
Foamex, L.P.
3005 Commercial Road
Fort Wayne, IN 46809

Re: **003-14443**
Second Administrative Amendment to
Part 70 003-7680-00225

Dear Mr. Banks:

Foamex, L.P. was issued a permit on March 22, 1999 for a stationary polyurethane foam production and foam processing plant. A letter requesting a Significant Source Modification to add one (1) additional thermal reticulation unit to their existing plant, and to change the limited monthly throughput for an existing flame lamination unit (FL-02) from 24,653,313 ft^2/month to 5,000,000 ft^2/month was received on January 30, 2001. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows:

1. All references to the Office of Air Management have been changed to the Office of Air Quality on all corrected permit pages.

2. The reference to Enhanced New Source Review has been removed form the cover page because this has been repealed.

3. The new thermal reticulation unit is being added to Section A.2 as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(1) one (1) natural gas flame laminator machine (ID No. FL-02), with a maximum capacity of 40,000 square feet per hour, and exhausting through one (1) stack (ID No. 02-002);

(2) one (1) polyurethane foam manufacturing process (ID No. PLC-01), producing a maximum of nine (9) million board feet per day of polyurethane foam, consisting of:
  (a) two (2) mix chambers;
  (b) one (1) periphlex pour line, exhausting through ten (10) stacks (ID Nos. 1-5, 9-12,and 19);
  (c) one (1) ester pour line, exhausting through six (6) stacks (ID Nos. 21-26);
  (d) three (3) foam bun storage areas (Carpet Underlay Mezzanine Bun Grabber Area, South Finishing Mezzanine Bun Grabber Area, and the Loaf Stacker Area), exhausting through fourteen (14) stacks (ID Nos. 13-15, 17, 18, 20, 27-33, and 49);

(3) one (1) thermal reticulation unit (ID No. TRU-01), processing a maximum of 10 cycles of polyurethane foam buns per hour, at a maximum volume of 244,296 cubic inches of foam per cycle, exhausting through ten (10) stacks (ID Nos. 35-44);

(4) two (2) natural gas fired boilers (ID Nos. IPB-01 and IPB-02), each rated at 12.6 million (MM) British thermal units (Btu) per hour, using No. 2 distillate fuel oil as back-up fuel,

and each exhausting through one (1) stack (ID Nos. 45 and 46);

(5) one (1) 4 sheet felt press (ID No. FPA), pressing a maximum of 131,400 sheets per year, exhausting through one (1) stack (ID No. 47); ~~and~~

(6) Increase in the foam processing rate of the existing one (1) 6 sheet felt press C (ID No. FPC), from 211,000 sheets per year to 300,000 sheets per year, exhausting through one (1) stack (ID No. 48).

(7) The installation of one (1) new 6 sheet felt press D (ID No. FPD), with a foam processing rate of 300,000 sheets per year, exhausting through one (1) stack (ID No. 49)**; and**

(8) One (1) Thermal Reticulation Unit, identified as TRU-02, with a maximum throughput of 150,000,000 board ft of polyurethane foam per year, and exhausting through seven (7) stacks (52-58).

4. Condition D.1.1 shall be modified to reflect the new emission limit for the existing flame lamination unit (FL-02) as follows:

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

~~Pursuant to CP 003-5815-00225, issued August 15, 1996,~~ the total emissions of VOC shall be limited to no more than a fixed monthly limit of ~~2.0~~ **0.4** tons per month, which is equivalent to a laminated foam production rate of ~~24,653,313~~ **5,000,000** square feet per month based on a stack test emission factor of 6.5 lbs VOC per hour at maximum capacity. This production limit is required to limit the potential to emit of VOC to ~~24~~ **less than 25** tons per 365 consecutive day period. Compliance with this limit makes 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) not applicable. This limitation also renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

5. A new section D.7 shall be added as follows:

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]
(8) One (1) Thermal Reticulation Unit, identified as TRU-02, with a maximum throughput of 150,000,000 board ft of polyurethane foam per year, and exhausting through seven (7) stacks (52-58).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the total allowable PM emission rate from the thermal reticulation unit (ID No. TRU-02) shall not exceed 12.1 pounds per hour when operating at a process weight rate of 10,000 pounds per hour. The pounds per hour limitation was calculated with the following equation:
Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and

P = process weight rate in tons per hour

$E = 4.10 (5)^{0.67}$
E = 12.1 pounds per hour

D.7.2 Volatile Organic Compounds (VOCs) [326 IAC 2-4.1-1] [326 IAC 8-1-6]

Pursuant to the MACT determination under 326 IAC 2-4.1-1 and the BACT determination under 326 IAC 8-1-6, operating conditions for the thermal reticulation unit (TRU-02) shall be the following:

(a) Total VOC emissions from the thermal reticulation unit shall not exceed 34.6 tons per year based on a stack test emission factor of 4.62×10^{-4} pounds of VOC per board foot of foam produced. Emissions of any single HAP from the thermal reticulation unit shall not exceed 16.04 tons per year based on a worst case stack test emission factor of 2.13×10^{-4} pound of HAP per board foot of foam produced. Emissions of any combination of HAPs from the thermal reticulation unit shall not exceed 31.07 tons per year based on a total HAP stack test emission factor of 4.14×10^{-4} pound of total HAPs per board foot of foam produced. The maximum throughput of foam shall not exceed 150,000,000 board feet per year.

(b) maintain the thermal reticulation unit in good working order; and

(c) utilize best management work practices to minimize VOC emissions from this unit. The work practices to be performed on the thermal reticulation unit include the following inspection and preventive maintenance procedures:

(1) The following preventive maintenance procedures will be performed on the thermal reticulation unit door on a bi-weekly basis:
- **(A) Grease North & South gear boxes--5 grease fittings each box.**
- **(B) Grease North & South Door linkages--4 fittings each side of each door.**
- **(C) Lubricate shuttle table drive chains and idler bearings.**
- **(D) Inspect oil level in hydraulic reservoir (added/ok).**

(2) The following preventive maintenance procedures will be performed on the thermal reticulation unit on an annual basis:
- **(A) Replace the valves on the oxygen and hydrogen lines.**
- **(B) Bring old units to the shop and rebuild.**
- **(C) Tag the valves rebuilt and date.**

(3) The following inspections will be done on the thermal reticulation unit cycle on a semi-annual basis:
- **(A) North and south door open and close action.**
- **(B) Check vacuum time and adjust if necessary.**
- **(C) Fuel fill--valve open and shut and proper times.**
- **(D) Fuel pressures--during flow and static.**
- **(E) Holding of plug purge after fuel fill up to ignition.**
- **(F) Watch Erdco during fuel fill.**

(4) The thermal reticulation unit pump will be lubricated on a semi-annual

basis using the following procedures:

(A) Grease both ends of the Nash pump.

(B) Make sure extra grease does not plug up the water drains.

(5) The following preventive maintenance procedures will be performed on the thermal reticulation unit on a daily basis:

(A) Drain the condensed water from the exhaust line into the bucket.

(B) Check the oil level through the side sight glass.

(C) Check for oil flow (sight glass with white ball).

(D) Empty condensate bucket as needed.

(E) Check roots blower oil level and add as needed.

(F) Check the oil purifier as follows: Check gauge for proper pressure between (20-25 psi). When the purifier pressure exceeds 40 psi, service the unit. Refer to Task # 6110 in PM location book.

(G) Check Nash water supply for the proper operation.

(6) The following preventive maintenance procedures will be performed on the thermal reticulation unit every 1,500 hours:

(A) Drain oil, remove side cover.

(B) Remove baffle, remove valves.

(C) Wipe inside of chamber to remove residue.

(D) Install new or rebuilt valves.

(E) Clean baffle and reinstall.

(F) Install side cover with new gasket, if needed.

(G) Refill with oil.

(H) Check V -belts for wear and proper tension, replace if needed.

(I) Check gas ballast valves, replace if needed.

(J) Note the actual hours.

(7) The following preventive maintenance procedures will be performed on the thermal reticulation unit blower every 1,500 hours:

(A) Change air filter.

(B) Check oil purifier for proper operation.

(C) Check stokes for water leaks.

(D) Check V -belts.

(8) The following preventive maintenance procedures will be performed on the thermal reticulation unit manometer valve on a monthly basis:

(A) Remove manometer valve.

(B) Install new or rebuilt valve.

(C) Rebuild, tag and stock valve.

(9) The following preventive maintenance procedures will be performed on the thermal reticulation unit shot pin on a semi-annual basis:

(A) Check shot pin hydraulic cylinder mount for broken or loose bolts.

(B) Check shot pin hydraulic cylinder assembly plates for torque to chamber.

(C) Check shot pin limit switch mounting bolts for tightness.

(D) Inspect E.C.S. high temperature probes (3) for proper condition.

(E) Inspect oxygen and hydrogen gauges for zero calibration.

(F) Inspect Erdco 34 and check for any alarm condition.

(10) The following preventive maintenance procedures will be performed on the thermal reticulation unit on a quarterly basis:
(A) For water line heat exchanger, open and clean-out all tubes.

(11) The following preventive maintenance procedures will be performed on the thermal reticulation unit oil purifier on a weekly basis:
(A) When oil pressure goes above 40 psi, service as follows:
(i) Remove power.
(ii) Valve off hoses.
(iii) Drain oil from unit (dispose of properly).
(iv) Disassemble and remove filter.
(v) Clean-out then install new filter .
(vi) Reconnect hoses and open valves.
(vii) Bleed-off air.
(viii) Plug in unit and check for proper pressure (25psi).
(ix) Check oil level in stokes. Fill as needed.

(12) The following preventive maintenance procedures will be performed on the thermal reticulation unit roof valves on a semi-annual basis:
(A) Replace oxygen and hydrogen roof valves.
(B) Rebuild valves - date and stock.

(13) The following preventive maintenance procedures will be performed on the thermal reticulation unit blower on a quarterly basis:
(A) Change filter on the active unit.

(14) The following preventive maintenance procedures will be performed on the thermal reticulation unit manometer tube on a monthly basis:
(A) Disassemble White manometer tube valve. Clean or rebuild as needed.
(B) Check other valve between Whitey valve and the chamber for condition.

(15) The following preventive maintenance procedures will be performed on the thermal reticulation unit plug purge valve on a weekly basis:
(A) Replace the plug purge valve.
(B) Rebuild, tag and stock valve.

(17) The following preventive maintenance procedures will be performed on the thermal reticulation unit charge valve O-ring on a monthly basis:
(A) Replace the o-ring on the charge valve face inside the chamber.

(18) The following preventive maintenance procedures will be performed on the thermal reticulation unit charge valve on a monthly basis:
(A) Replace the o-ring on the stem of the charge valve.

(19) The following preventive maintenance procedures will be performed on the

thermal reticulation unit control line filter on a weekly basis:

(A) Clean the vacuum control line filters.

(20) The following preventive maintenance procedures will be performed on the thermal reticulation unit pump shaft seals on a weekly basis:

(A) Check the drip from the shaft seals and make sure it is between one drop per second to five drops per second. Too much flow can cause problems at the effluent. Too little can destroy the pump.

(B) Check the seals when the vacuum relief valve is drawing air.

(21) The following preventive maintenance procedures will be performed on the thermal reticulation unit hydraulic system on a semi-annual basis:

(A) Remove and replace or remove, clean, and replace suction filter for the hydraulic pump.

(22) The fluid will be changed in the thermal reticulation unit hydraulic system on an annual basis using the following procedures:

(A) Drain all the fluid from the hydraulic system.

(B) Refill the system with new fluid.

Compliance Determination Requirements

D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 24 and 36 months after issuance of this permit, the Permittee shall perform stack testing, to verify the emission factors used to determine the potential emissions from this unit, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.4 Record Keeping Requirements

(a) The Permittee shall maintain records in accordance with (1) through (3) below for the thermal reticulation unit (ID No. TRU-02). Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with Condition D.7.2.

(1) The board feet of foam produced per month;

(2) A log of the dates of use; and

(3) The weight of VOCs and HAPs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

6. The quarterly reporting form for the flame laminator (FL-02) shall be revised to reflect the new throughput limitation as follows:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR ~~MANAGEMENT~~ QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Foamex, L.P.
Source Address: 3005 Commercial Road, Fort Wayne, Indiana 46809
Mailing Address: 3005 Commercial Road, Fort Wayne, Indiana 46809
Part 70 Permit No.: T003-7680-00225
Facility: one (1) natural gas flame laminator machine (ID No. FL-02)
Parameter: VOC emissions
Limit: the total emissions of VOC shall be limited to no more than a fixed monthly limit of ~~2.0~~ **0.4** tons per month, which is equivalent to a laminated foam production rate of ~~24,653,313~~ **5,000,000** square feet per month.

YEAR: _____

Month	Laminated Foam Production This Month (sq. feet)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of

this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Trish Earls, at (973) 575-2555, ext. 3219 or dial (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
TE/EVP
cc: File - Allen County
U.S. EPA, Region V
Allen County Health Department
Air Compliance Section Inspector Jennifer Dorn
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michelle Boner

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Foamex, L.P.
3005 Commercial Road
Fort Wayne, Indiana 46809

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T003-7680-00225	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: March 22, 1999

First Minor Source Modification No.: 003-12178-00225, issued May 10, 2000
First Administrative Amendment No.: AA003-12211-00225, issued May 10, 2000

First Significant Source Modification No.: 003-12873-00225	Pages Affected: 4, 5, 6, 28, 39a - 39d, 44
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date:

Second Administrative Amendment No.: 003-14443-00225	Pages Affected: 4, 5, 6, 28, 39a - 39d, 44
Issued by: Original signed by Paul Dubenetzky for Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: August 15, 2001

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary polyurethane foam production and foam processing plant.

Responsible Official:	William Banks
Source Address:	3005 Commercial Road, Fort Wayne, Indiana 46809
Mailing Address:	3005 Commercial Road, Fort Wayne, Indiana 46809
SIC Code:	3086
County Location:	Allen
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(1) one (1) natural gas flame laminator machine (ID No. FL-02), with a maximum capacity of 40,000 square feet per hour, and exhausting through one (1) stack (ID No. 02-002);

(2) one (1) polyurethane foam manufacturing process (ID No. PLC-01), producing a maximum of nine (9) million board feet per day of polyurethane foam, consisting of:
- (a) two (2) mix chambers;
- (b) one (1) periphlex pour line, exhausting through ten (10) stacks (ID Nos. 1-5, 9-12, and 19);
- (c) one (1) ester pour line, exhausting through six (6) stacks (ID Nos. 21-26);
- (d) three (3) foam bun storage areas (Carpet Underlay Mezzanine Bun Grabber Area, South Finishing Mezzanine Bun Grabber Area, and the Loaf Stacker Area), exhausting through fourteen (14) stacks (ID Nos. 13-15, 17, 18, 20, 27-33, and 49);

(3) one (1) thermal reticulation unit (ID No. TRU-01), processing a maximum of 10 cycles of polyurethane foam buns per hour, at a maximum volume of 244,296 cubic inches of foam per cycle, exhausting through ten (10) stacks (ID Nos. 35-44);

(4) two (2) natural gas fired boilers (ID Nos. IPB-01 and IPB-02), each rated at 12.6 million (MM) British thermal units (Btu) per hour, using No. 2 distillate fuel oil as back-up fuel, and each exhausting through one (1) stack (ID Nos. 45 and 46);

(5) one (1) 4 sheet felt press (ID No. FPA), pressing a maximum of 131,400 sheets per year, exhausting through one (1) stack (ID No. 47);

(6) Increase in the foam processing rate of the existing one (1) 6 sheet felt press (ID No. FPC), from 211,000 sheets per year to 300,000 sheets per year, exhausting through one (1) stack (ID No. 48);

(7) The installation of one (1) new 6 sheet felt press D (IC NO. FPD), with a foam processing rate of 300,000 sheets per year, exhausting through one (1) stack (ID No. 49); and

(8) One (1) Thermal Reticulation Unit, identified as TRU-02, with a maximum throughput of 150,000,000 board ft per year, and exhausting through seven (7) stacks (52-58).

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(1) polyol storage tanks with VOC emissions less than 3 pounds per hour or 15 pounds per day (one tank has a storage capacity of 30,000 gallons); and
(2) one (1) 20,000 gallon No. 2 fuel oil storage tank with VOC emissions less than 3 pounds per hour or 15 pounds per day.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22); and

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(1) one (1) natural gas flame laminator machine (ID No. FL-02), with a maximum capacity of 40,000 square feet per hour, and exhausting through one (1) stack (ID No. 02-002).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

The total emissions of VOC shall be limited to no more than a fixed monthly limit of 0.4 tons per month, which is equivalent to a laminated foam production rate of 5,000,000 square feet per month based on a stack test emission factor of 6.5 lbs VOC per hour at maximum capacity. This production limit is required to limit the potential to emit of VOC to less than 25 tons per 365 consecutive day period. Compliance with this limit makes 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) not applicable. This limitation also renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the total allowable PM emission rate from the natural gas flame laminator machine (ID No. FL-02) shall not exceed 4.1 pounds per hour when operating at a process weight rate of 2,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

$E = 4.10\ (1)^{0.67}$
E = 4.1 pounds per hour = 18.0 tons per year

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]
(8) One (1) Thermal Reticulation Unit, identified as TRU-02, with a maximum throughput of 150,000,000 board ft of polyurethane foam per year, and exhausting through seven (7) stacks (52-58).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the total allowable PM emission rate from the thermal reticulation unit (ID No. TRU-02) shall not exceed 12.1 pounds per hour when operating at a process weight rate of 10,000 pounds per hour. The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

$E = 4.10\ (5)^{0.67}$
E = 12.1 pounds per hour

D.7.2 Volatile Organic Compounds (VOCs) [326 IAC 2-4.1-1] [326 IAC 8-1-6]

Pursuant to the MACT determination under 326 IAC 2-4.1-1 and the BACT determination under 326 IAC 8-1-6, operating conditions for the thermal reticulation unit (TRU-02) shall be the following:

(a) Total VOC emissions from the thermal reticulation unit shall not exceed 34.6 tons per year based on a stack test emission factor of 4.62×10^{-4} pounds of VOC per board foot of foam produced. Emissions of any single HAP from the thermal reticulation unit shall not exceed 16.04 tons per year based on a worst case stack test emission factor of 2.13×10^{-4} pound of HAP per board foot of foam produced. Emissions of any combination of HAPs from the thermal reticulation unit shall not exceed 31.07 tons per year based on a total HAP stack test emission factor of 4.14×10^{-4} pound of total HAPs per board foot of foam produced. The maximum throughput of foam shall not exceed 150,000,000 board feet per year.

(b) maintain the thermal reticulation unit in good working order; and

(c) utilize best management work practices to minimize VOC emissions from this unit. The work practices to be performed on the thermal reticulation unit include the following inspection and preventive maintenance procedures:

(1) The following preventive maintenance procedures will be performed on the thermal reticulation unit door on a bi-weekly basis:
(A) Grease North & South gear boxes--5 grease fittings each box.
(B) Grease North & South Door linkages--4 fittings each side of each door.
(C) Lubricate shuttle table drive chains and idler bearings.
(D) Inspect oil level in hydraulic reservoir (added/ok).

(2) The following preventive maintenance procedures will be performed on the thermal reticulation unit on an annual basis:
(A) Replace the valves on the oxygen and hydrogen lines.
(B) Bring old units to the shop and rebuild.
(C) Tag the valves rebuilt and date.

(3) The following inspections will be done on the thermal reticulation unit cycle on a semi-annual basis:
(A) North and south door open and close action.
(B) Check vacuum time and adjust if necessary.
(C) Fuel fill--valve open and shut and proper times.
(D) Fuel pressures--during flow and static.
(E) Holding of plug purge after fuel fill up to ignition.
(F) Watch Erdco during fuel fill.

(4) The thermal reticulation unit pump will be lubricated on a semi-annual basis using the following procedures:
(A) Grease both ends of the Nash pump.
(B) Make sure extra grease does not plug up the water drains.

(5) The following preventive maintenance procedures will be performed on the thermal reticulation unit on a daily basis:
(A) Drain the condensed water from the exhaust line into the bucket.
(B) Check the oil level through the side sight glass.
(C) Check for oil flow (sight glass with white ball).
(D) Empty condensate bucket as needed.
(E) Check roots blower oil level and add as needed.
(F) Check the oil purifier as follows: Check gauge for proper pressure between (20-25 psi). When the purifier pressure exceeds 40 psi, service the unit. Refer to Task # 6110 in PM location book.
(G) Check Nash water supply for the proper operation.

(6) The following preventive maintenance procedures will be performed on the thermal reticulation unit every 1,500 hours:
(A) Drain oil, remove side cover.
(B) Remove baffle, remove valves.
(C) Wipe inside of chamber to remove residue.
(D) Install new or rebuilt valves.
(E) Clean baffle and reinstall.
(F) Install side cover with new gasket, if needed.
(G) Refill with oil.
(H) Check V -belts for wear and proper tension, replace if needed.
(I) Check gas ballast valves, replace if needed.
(J) Note the actual hours.

(7) The following preventive maintenance procedures will be performed on the thermal reticulation unit blower every 1,500 hours:
(A) Change air filter.
(B) Check oil purifier for proper operation.
(C) Check stokes for water leaks.
(D) Check V -belts.

(8) The following preventive maintenance procedures will be performed on the thermal reticulation unit manometer valve on a monthly basis:

(A) Remove manometer valve.
(B) Install new or rebuilt valve.
(C) Rebuild, tag and stock valve.

(9) The following preventive maintenance procedures will be performed on the thermal reticulation unit shot pin on a semi-annual basis:
(A) Check shot pin hydraulic cylinder mount for broken or loose bolts.
(B) Check shot pin hydraulic cylinder assembly plates for torque to chamber.
(C) Check shot pin limit switch mounting bolts for tightness.
(D) Inspect E.C.S. high temperature probes (3) for proper condition.
(E) Inspect oxygen and hydrogen gauges for zero calibration.
(F) Inspect Erdco 34 and check for any alarm condition.

(10) The following preventive maintenance procedures will be performed on the thermal reticulation unit on a quarterly basis:
(A) For water line heat exchanger, open and clean-out all tubes.

(11) The following preventive maintenance procedures will be performed on the thermal reticulation unit oil purifier on a weekly basis:
(A) When oil pressure goes above 40 psi, service as follows:
(i) Remove power.
(ii) Valve off hoses.
(iii) Drain oil from unit (dispose of properly).
(iv) Disassemble and remove filter.
(v) Clean-out then install new filter .
(vi) Reconnect hoses and open valves.
(vii) Bleed-off air.
(viii) Plug in unit and check for proper pressure (25psi).
(ix) Check oil level in stokes. Fill as needed.

(12) The following preventive maintenance procedures will be performed on the thermal reticulation unit roof valves on a semi-annual basis:
(A) Replace oxygen and hydrogen roof valves.
(B) Rebuild valves - date and stock.

(13) The following preventive maintenance procedures will be performed on the thermal reticulation unit blower on a quarterly basis:
(A) Change filter on the active unit.

(14) The following preventive maintenance procedures will be performed on the thermal reticulation unit manometer tube on a monthly basis:
(A) Disassemble White manometer tube valve. Clean or rebuild as needed.
(B) Check other valve between Whitey valve and the chamber for condition.

(15) The following preventive maintenance procedures will be performed on the thermal reticulation unit plug purge valve on a weekly basis:
(A) Replace the plug purge valve.
(B) Rebuild, tag and stock valve.

(17) The following preventive maintenance procedures will be performed on the thermal reticulation unit charge valve O-ring on a monthly basis:
(A) Replace the o-ring on the charge valve face inside the chamber.

(18) The following preventive maintenance procedures will be performed on the thermal reticulation unit charge valve on a monthly basis:
(A) Replace the o-ring on the stem of the charge valve.

(19) The following preventive maintenance procedures will be performed on the thermal reticulation unit control line filter on a weekly basis:
(A) Clean the vacuum control line filters.

(20) The following preventive maintenance procedures will be performed on the thermal reticulation unit pump shaft seals on a weekly basis:
(A) Check the drip from the shaft seals and make sure it is between one drop per second to five drops per second. Too much flow can cause problems at the effluent. Too little can destroy the pump.
(B) Check the seals when the vacuum relief valve is drawing air.

(21) The following preventive maintenance procedures will be performed on the thermal reticulation unit hydraulic system on a semi-annual basis:
(A) Remove and replace or remove, clean, and replace suction filter for the hydraulic pump.

(22) The fluid will be changed in the thermal reticulation unit hydraulic system on an annual basis using the following procedures:
(A) Drain all the fluid from the hydraulic system.
(B) Refill the system with new fluid.

Compliance Determination Requirements

D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 24 and 36 months after issuance of this permit, the Permittee shall perform stack testing, to verify the emission factors used to determine the potential emissions from this unit, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.4 Record Keeping Requirements

(a) The Permittee shall maintain records in accordance with (1) through (3) below for the thermal reticulation unit (ID No. TRU-02). Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with Condition D.7.2.

(1) The board feet of foam produced per month;

(2) A log of the dates of use; and

(3) The weight of VOCs and HAPs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Foamex, L.P.
Source Address: 3005 Commercial Road, Fort Wayne, Indiana 46809
Mailing Address: 3005 Commercial Road, Fort Wayne, Indiana 46809
Part 70 Permit No.: T003-7680-00225
Facility: one (1) natural gas flame laminator machine (ID No. FL-02)
Parameter: VOC emissions
Limit: the total emissions of VOC shall be limited to no more than a fixed monthly limit of 0.4 tons per month, which is equivalent to a laminated foam production rate of 5,000,000 square feet per month.

YEAR: _____

Month	Laminated Foam Production This Month (sq. feet)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____